BRUHAT BANGALORE MAHANAGARA PALIKE

BILL - 04
& FINAL.

NAME OF THE WORK: White Topping of Road from Seshadripuram first grade College to Aroma Bakery Junction via 3rd Cross road,1st Main Road and 16th B Cross Road.

CLIENT: BRUHAT BANGALORE MAHANAGARA PALIKE

CONSULTANTS: Infra Support Engineering Consultants Pvt Ltd.

AGENCY: M/s **NCC LIMITED**

QUALITY REPORTS

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Waak	M-40	64	13.04.23	20.04.23	7days	8.41	2492	890	39.55	39.80	-0.63
							8.47	2509	905	40.22		1.05
							8.43	2498	892	39.64		-0.40
					11.05.23	28days	8.39	2486	1196	53.15	53.47	-0.59
							8.52	2524	1204	53.51		0.07
							8.54	2530	1210	53.77		0.56
							8.45	2504	1183	52.57	53.06	-0.92
							8.46	2507	1210	53.77		1.33
							8.49	2515	1189	52.84		-0.41

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India Support Engineering Consultants Pvt. Ltd. Bengaluru PMC

A.E.E. (Project)

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	64	13.04.23	11.04.23	28 days	8.47	2510	1199	53.29	52.61	1.29
							8.37	2480	1182	52.53		0.15
							8.49	2516	1170	52.00		-1.16
					11.04.23	28 days	8.51	2521	1239	55.07	54.88	0.35
							8.37	2480	1244	55.29		0.75
							8.45	2504	1221	54.27		-1.11
							8.48	2513	1195	53.11	54.22	-2.05
							8.38	2483	1240	55.11		1.64
							8.45	2504	1225	54.44		0.41

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Infra Support Engineering Consultants Pvt. Ltd. Bengaluru PMC

BBMP

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	57	14.04.23	21.04.23	7days	8.46	2507	887	39.42	39.31	+0.27
							8.49	2515	892	39.64		+0.83
							8.43	2498	875	38.88		-1.09
					12.05.23	28days	8.39	2486	1183	52.57	52.70	-0.25
							8.42	2495	1196	53.15		+0.85
							8.51	2521	1179	52.40		-0.56
							8.56	2536	1198	53.24	52.29	+1.82
							8.49	2515	1170	52.00		-0.55
							8.52	2524	1162	51.64		-1.24

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Project Division
Yelahanka Zone
BBMP Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	57	14.04.23	12.05.23	28 days	8.42	2498	1244	55.29	53.90	2.58
							8.44	2504	1195	53.11		-1.47
							8.50	2522	1199	53.29		-1.13
					12.05.23	28 days	8.44	2504	1184	53.81	52.83	1.86
							8.35	2478	1165	51.78		-1.99
							8.51	2525	1190	52.89		0.11
							8.52	2524	1203	53.47	54.10	-1.16
							8.48	2513	1240	55.11		1.87
							8.45	2504	1209	53.73		-0.68

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Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC UNDER	M40	52.0	15.04.23	22.04.23	7 days	8.45	2503	849	37.73	38.06	-0.87
							8.49	2516	865	38.44		0.99
							8.42	2495	855	38.00		-0.16
					13.05.23	28 days	8.38	2483	1159	51.51	51.59	-0.16
							8.47	2510	1178	52.36		1.49
							8.41	2492	1145	50.89		-1.36
							8.45	2504	1185	52.67	52.10	1.09
							8.42	2495	1170	52.00		-0.19
							8.36	2507	1162	51.64		-0.88

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	52.8	15.04.23	13.05.23	28 days	8.43	2.498	1242	55.20	53.50	3.18
							8.52	2.524	1164	51.73		-3.31
							8.44	2.501	1205	53.56		0.11
					13.05.23	28days	8.43	2.498	1242	55.20	54.48	1.32
							8.44	2.501	1205	53.56		-1.69
							8.52	2.524	1230	54.67		0.35

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Project Division
Yelahanka Zone
Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	103.50	18.04.23	25.04.23	7 days	8.53	2527	919	40.84	40.29	1.37
							8.45	2504	874	38.84		-3.60
							8.49	2516	927	41.20		2.26
					16.05.23	28 days	8.42	2495	1225	54.44	54.72	-0.51
							8.45	2504	1265	56.22		+2.67
							8.47	2510	1204	53.51		-2.21
							8.44	2504	1194	53.07	53.94	-1.61
							8.42	2499	1242	55.20		2.34
							8.46	2510	1205	53.56		-0.70

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NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M40	103.50	18.04.23	16.05.23	28 days	8.44	2504	1201	53.38	54.33	-1.75
							8.49	2519	1242	55.20		1.60
							8.50	2522	1224	54.40		0.13
					16.05.23	28 days	8.47	2513	1194	53.07	53.08	-0.02
							8.43	2501	1184	52.62		-0.87
							8.45	2507	1205	53.56		0.90
							8.44	2504	1217	54.09	53.27	1.54
							8.53	2531	1188	52.62		-1.22
							8.39	2490	1195	53.11		-0.30

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	79.0 m³	17.04.23	24.04.23	7 days	8.45	2504	904	40.18	39.38	2.03
							8.54	2534	899	39.96		1.47
							8.40	2493	873	38.80		-1.47
					15.05.23	28 days	8.47	2513	1205	53.56	54.58	-1.87
							8.38	2487	1254	55.73		2.11
							8.42	2499	1225	54.44		-0.26
							8.45	2507	1195	53.11	53.76	-1.21
							8.53	2531	1189	52.84		-1.71
							8.50	2522	1245	55.33		2.92

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Project Division
Yelahanka Zone

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	79.003	17.04.23	15.05.23	28days	8.49	2515	1264	56.17	54.44	3.18
							8.60	2548	1201	53.37		-1.97
							8.52	2524	1210	53.77		-1.23
					15.05.23	28days	8.40	2489	1190	52.88	53.73	-1.58
							8.44	2500	1235	54.88		2.14
							8.47	2510	1202	53.42		-0.58
							8.44	2500	1242	55.20	55.06	0.25
							8.45	2504	1250	55.55		0.89
							8.47	2510	1225	54.44		-1.13

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Infra Support Engineering Consultants Pvt. Ltd. PMC Bengaluru

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP Bangalore - 92

NCC LIMITED

hite Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross Road.

SIEVE ANALYSIS

(FOR COARSE AGGREGATE, IS:383)

oratory	NCC QC Lab	Date of Sampling	13.04.2023
cription of Material	20 MM	Date of Testing	13.04.2023
rce of Material	Chikkaballapura	Tested by	Jointly
ation	Yelahanka	Sampled by	Jointly

SIEVE ANALYSIS FOR INDIVIDUAL AGGREGATE

of Sample : 5000gms 20MM

Sieve nm)	Weight Retained (gms)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing	Percentage Passing for Single sized aggregate of nominal size as per table 2 of IS: 383
40	0	0	0	100.00	100
20	258	5.16	5.16	94.84	85 - 100
10	4664	93.28	98.44	1.56	0 - 20
.75	05	0.1	98.54	1.46	0 - 5
'an	03	0.06	100.00	0	-

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Bengaluru Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross road

SIEVE ANALYSIS (IS: 383 - 11970

(FOR FINE AGGREGATE - SAND)

Description of Material	M. Sand	**Date of Sampling**	13.04.2023
Source of Material	Chikkaballapura	**Date of Testing**	13.04.2023
Stretch	Yelahanka	**Tested by**	Jointly
Sample No.	(1)	**Sampled by**	Jointly

W : 1000 gm

I.S. Sieve (mm)	Weight Retained (gm)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing for				
				As per Test	I.S. Requirement for			
					Zone-I	Zone-II	Zone-III	Zone-IV
10	0	0	0	100.00	100	100	100	100
4.75	0	0	0	100.00	90 - 100	90 - 100	90 - 100	95 - 100
2.36	159	15.90	15.90	84.10	60 -95	75 - 100	85 - 100	95 - 100
1.18	108	10.80	26.70	73.30	30 - 70	55 - 90	75 - 100	90 - 100
0.6	307	30.70	57.40	42.60	15 - 34	35 - 59	60 - 79	80 - 100
0.3	211	21.10	78.50	21.50	5 - 20	8 - 30	12 - 40	15 - 50
0.15	172	17.20	95.70	4.30	0 -20	0 - 20	0 - 20	0 - 15
0.075	24	2.40	98.10	1.90	Maximum 3%			
Pan	19	1.90	100.00	-				
Total	1000							
Fineness Modulus					2 - 3.5			

Remarks:

Contractor's Representative

Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross Road.

SIEVE ANALYSIS

(FOR COARSE AGGREGATE, IS:383)

aboratory	NCC QC lab	Date of Sampling	13.04.2023
escription of Material	12.5MM	Date of Testing	13.04.2023
ource of Material	Chikkaballapara	Tested by	Jointly
ocation	Yelahanka	Sampled by	Jointly

SIEVE ANALYSIS FOR INDIVIDUAL AGGREGATE

t. of Sample : 6745 gms — 12.5 MM

S. Sieve (mm)	Weight Retained (gms)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing	Percentage Passing for Single sized aggregate of nominal size as per table 2 of IS: 383
16	0	0	0	100.00	100
12.5	391	5.80	5.80	94.20	90 - 100
10	2749	40.76	46.56	53.44	40 - 85
4.75	3581	53.09	99.65	0.35	0 - 10
Pan	24	0.35	100.00	0	-

Contracted Representative

Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

ite Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross Road.

SIEVE ANALYSIS

(FOR COARSE AGGREGATE, IS:383)

ıratory	NCC QC Lab	Date of Sampling	13.04.2023
ription of Material	12.5MM	Date of Testing	13.04.2023
ce of Material	Chikkaballapara	Tested by	Jointly
ıtion	Yelahanka	Sampled by	Jointly

SIEVE ANALYSIS FOR INDIVIDUAL AGGREGATE

of Sample : 6745 gms — 12.5 MM

Sieve ım)	Weight Retained (gms)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing	Percentage Passing for Single sized aggregate of nominal size as per table 2 of IS: 383
16	0	0	0	100.00	100
2.5	391	5.80	5.80	94.20	90 - 100
10	2749	40.76	46.56	53.44	40 - 85
4.75	3581	53.09	99.65	0.35	0 - 10
Pan	24	0.35	100.00	0	-

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Support Engineering Consultants Pvt. Ltd. Bengaluru

Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross road

SIEVE ANALYSIS (IS: 383 - 11970
(FOR FINE AGGREGATE - SAND)

Description of Material	M. Sand	**Date of Sampling**	13.04.2023
Source of Material	Chikkaballapura	**Date of Testing**	13.04.2023
Stretch	Yelahanka	**Tested by**	Jointly
Sample No.	(1)	**Sampled by**	Jointly

TW : 1000 gm

I.S. Sieve (mm)	Weight Retained (gm)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing for				
				As per Test	I.S. Requirement for			
					Zone-I	Zone-II	Zone-III	Zone-IV
10	0	0	0	100.00	100	100	100	100
4.75	0	0	0	100.00	90 - 100	90 - 100	90 - 100	95 - 100
2.36	159	15.90	15.90	84.10	60 -95	75 - 100	85 - 100	95 - 100
1.18	108	10.80	26.70	73.30	30 - 70	55 - 90	75 - 100	90 - 100
0.6	307	30.70	57.40	42.60	15 - 34	35 - 59	60 - 79	80 - 100
0.3	211	21.10	78.50	21.50	5 - 20	8 - 30	12 - 40	15 - 50
0.15	172	17.20	95.70	4.30	0 -20	0 - 20	0 - 20	0 - 15
0.075	24	2.40	98.10	1.90	Maximum 3%			
Pan	19	1.90	100.00	-				
Total	1000							
neness Modulus					2 - 3.5			

emarks :

NCC LIMITED BANGALORE

Contractor's Representative

Support Engineering Consultants Pvt. Ltd. Bengaluru

Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

hite Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross Road.

SIEVE ANALYSIS

(FOR COARSE AGGREGATE, IS:383)

boratory	NCC QC Lab	Date of Sampling	13.04.2023
scription of Material	20 MM	Date of Testing	13.04.2023
arce of Material	Chikkaballapura	Tested by	Jointly
cation	Yelahanka	Sampled by	Jointly

SIEVE ANALYSIS FOR INDIVIDUAL AGGREGATE

. of Sample : 5000gms — 20MM

. Sieve mm)	Weight Retained (gms)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing	Percentage Passing for Singie sized aggregate of nominal size as per table 2 of IS: 383
40	0	0	0	100.00	100
20	258	5.16	5.16	94.84	85 - 100
10	4664	93.28	98.44	1.56	0 - 20
4.75	05	0.1	98.54	1.46	0 - 5
Pan	03	0.06	100.00	0	-

NCC LIMITED BANGALORE

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ontractor's presentative

Consultants Representative

Infra Support Engineering Services Pvt. Ltd. Bengaluru

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

ıite Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross Road.

SIEVE ANALYSIS

(FOR COARSE AGGREGATE, IS:383)

ɔratory	NCC QC Lab	**Date of Sampling**	13.04.2023
ɾiption of Material	12.5MM	**Date of Testing**	13.04.2023
ɾce of Material	Chikkaballapura	**Tested by**	Jointly
ıtion	Yelahanka	**Sampled by**	Jointly

SIEVE ANALYSIS FOR INDIVIDUAL AGGREGATE

of Sample : 6745 gms	12.5 MM				
Sieve m)	Weight Retained (gms)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing	Percentage Passing for Single sized aggregate of nominal size as per table 2 of IS: 383
6	0	0	0	100.00	100
.5	391	5.80	5.80	94.20	90 - 100
0	2749	40.76	46.56	53.44	40 - 85
75	3581	53.09	99.65	0.35	0 - 10
an	24	0.35	100.00	0	-

Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross road

SIEVE ANALYSIS (IS: 383 - 11970
(FOR FINE AGGREGATE - SAND)

Description of Material	M. Sand	Date of Sampling	13.04.2023
Source of Material	Chikkaballapura	Date of Testing	13.04.2023
Stretch	Yelahanka	Tested by	Jointly
Sample No.	(1)	Sampled by	Jointly

TW : 1000 gm

I.S. Sieve (mm)	Weight Retained (gm)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing for				
				As per Test	I.S. Requirement for			
					Zone-I	Zone-II	Zone-III	Zone-IV
10	0	0	0	100.00	100	100	100	100
4.75	0	0	0	100.00	90 - 100	90 - 100	90 - 100	95 - 100
2.36	159	15.90	15.90	84.10	60 -95	75 - 100	85 - 100	95 - 100
1.18	108	10.80	26.70	73.30	30 - 70	55 - 90	75 - 100	90 - 100
0.6	307	30.70	57.40	42.60	15 - 34	35 - 59	60 - 79	80 - 100
0.3	211	21.10	78.50	21.50	5 - 20	8 - 30	12 - 40	15 - 50
0.15	172	17.20	95.70	4.30	0 -20	0 - 20	0 - 20	0 - 15
0.075	24	2.40	98.10	1.90	Maximum 3%			
Pan	19	1.90	100.00	-				
Total	1000							
Fineness Modulus					2 - 3.5			

Remarks :

NCC LIMITED BANGALORE

Contractors Representative

Consultants Representative

Clients Representative

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction Via 3rd cross road ,1st A main road ,16TH B Cross Road.

SIEVE ANALYSIS

(FOR COARSE AGGREGATE, IS:383)

aboratory	NCC QC Lab	Date of Sampling	13.04.2023
escription of Material	20 MM	Date of Testing	13.04.2023
ource of Material	Chikkaballapura	Tested by	Jointly
ocation	Yelahanka	Sampled by	Jointly

SIEVE ANALYSIS FOR INDIVIDUAL AGGREGATE

't. of Sample : 5000gms 20MM

S. Sieve (mm)	Weight Retained (gms)	Percentage Retained	Cumulative Percentage Retained	Percentage Passing	Percentage Passing for Single sized aggregate of nominal size as per table 2 of IS: 383
40	0	0	0	100.00	100
20	258	5.16	5.16	94.84	85 - 100
10	4664	93.28	98.44	1.56	0 - 20
4.75	05	0.1	98.54	1.46	0 - 5
Pan	03	0.06	100.00	0	-

Contractor's Representative

Consultants Representative

Clients Representative

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BBMP, Bangalore - 92

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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Waak	M-40	64	13.04.23	20.04.23	7days	8.41	2492	890	39.55	39.80	-0.63
							8.47	2509	905	40.22		1.05
							8.43	2498	892	39.64		-0.40
					11.05.23	28days	8.39	2486	1196	53.15	53.47	-0.59
							8.52	2524	1204	53.51		0.07
							8.54	2530	1210	53.77		0.56
							8.45	2504	1183	52.57	53.06	-0.92
							8.46	2507	1210	53.77		1.33
							8.49	2515	1189	52.84		-0.41

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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	64	13.04.23	11.04.23	28 days	8.47	2510	1199	53.29	52.61	1.29
							8.37	2480	1182	52.53		0.15
							8.49	2516	1170	52.00		-1.16
					11.04.23	28 days	8.51	2521	1239	55.07	54.88	0.35
							8.37	2480	1244	55.29		0.75
							8.45	2504	1221	54.27		-1.11
							8.48	2513	1195	53.11	54.22	-2.05
							8.38	2483	1240	55.11		1.64
							8.45	2504	1225	54.44		0.41

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Project Division
Yelahanka Zone

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	57 :	14.04.23	21.04.23	7 days	8.46	2507	887	39.42	39.31	+0.27
							8.49	2515	892	39.64		+0.83
							8.43	2498	875	38.88		-1.09
					12.05.23	28 days	8.39	2486	1183	52.57	52.70	-0.25
							8.42	2495	1196	53.15		+0.85
							8.51	2521	1179	52.40		-0.56
							8.56	2536	1198	53.24	52.29	+1.82
							8.49	2515	1170	52.00		-0.55
							8.52	2524	1162	51.64		-1.24

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore - 92
BBMP

B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	57 :	14.04.23	12.05.23	28 days	8.42	2498	1244	55.29	53.90	2.58
							8.44	2504	1195	53.11		-1.47
							8.50	2522	1199	53.29		-1.13
					12.05.23	28 days	8.44	2504	1184	53.81	52.83	1.86
							8.35	2478	1165	51.78		-1.99
							8.51	2525	1190	52.89		0.11
							8.52	2524	1203	53.47	54.10	-1.16
							8.48	2513	1240	55.11		1.87
							8.45	2504	1209	53.73		-0.68

NCC LIMITED BANGALORE CENTRE

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Asst. Executive Engineer BBMP Project Division Yelahanka Zone

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M-40	57	14.04.23	12.05.23	28 days	8.42	2498	1244	55.29	53.90	2.58
							8.44	2504	1195	53.11		-1.47
							8.50	2522	1199	53.29		-1.13
					12.05.23	28 days	8.44	2504	1184	53.81	52.83	1.86
							8.35	2478	1165	51.78		-1.99
							8.51	2525	1190	52.89		0.11
							8.52	2524	1203	53.47	54.10	-1.16
							8.48	2513	1240	55.11		1.87
							8.45	2504	1209	53.73		-0.68

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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC UNDER	M40	52.0	15.04.23	22.04.23	7 days	8.45	2503	849	37.73	38.06	-0.87
							8.49	2516	865	38.44		0.99
							8.42	2495	855	38.00		-0.16
					13.05.23	28 days	8.38	2483	1159	51.51	51.59	-0.16
							8.47	2510	1178	52.36		1.49
							8.41	2492	1145	50.89		-1.36
							8.45	2504	1185	52.67	52.10	1.09
							8.42	2495	1170	52.00		-0.19
							8.46	2507	1162	51.64		-0.88

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Yelahanka Zone
Bangalore - 92

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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	52.0	15.04.23	13.05.23	28 days	8.43	2.498	1242	55.20	53.50	3.18
							8.52	2.524	1164	51.73		-3.31
							8.44	2.501	1205	53.56		0.11
					13.05.23	28days	8.43	2.498	1242	55.20	54.48	1.32
							8.44	2.501	1205	53.56		-1.69
							8.52	2.524	1230	54.67		0.35

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Project Division
Yelahanka Zone

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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	103.50	18.04.23	25.04.23	7 days	8.53	2527	919	40.84	40.29	1.37
							8.45	2504	874	38.84		-3.60
							8.49	2516	927	41.20		2.26
					16.05.23	28 days	8.42	2495	1225	54.44	54.72	-0.51
							8.45	2504	1265	56.22		+2.67
							8.47	2510	1204	53.51		-2.21
							8.44	2504	1194	53.07	53.94	-1.61
							8.42	2499	1242	55.20		2.34
							8.46	2510	1205	53.56		-0.70

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Asst. Executive Engineer BBMP
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M40	103.50	18.04.23	16.05.23	28 day	8.44	2504	1201	53.38	54.33	-1.75
							8.49	2519	1242	55.20		1.60
							8.50	2522	1924	54.40		0.13
					16.05.23	28 day	8.47	2513	1194	53.07	53.08	-0.02
							8.43	2501	1184	52.62		-0.87
							8.45	2507	1205	53.56		0.90
							8.44	2504	1217	54.09	53.27	1.54
							8.53	2531	1188	52.62		-1.22
							8.39	2490	1195	53.11		-0.30

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BBMP

Asst. Executive Engineer
Project Division
Yelahanka Zone

NCC LIMITED

White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

Compressive strength test on concrete cubes specimens has been tested as per the guidelines of IS 516 /Part 1-2021 and the results are Tabulated below.

SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC Work	M40	79.0 M3	17.04.23	24.04.23	7 days	8.45	2504	904	40.18	39.38	2.03
							8.54	2534	899	39.96		1.47
							8.40	2493	873	38.80		-1.47
					15.05.23	28 days	8.47	2513	1205	53.56	54.58	-1.87
							8.38	2487	1254	55.73		2.11
							8.42	2499	1225	54.44		-0.26
							8.45	2507	1195	53.11	53.76	-1.21
							8.53	2531	1189	52.84		-1.71
							8.50	2522	1245	55.33		2.92

NCC LIMITED BANGALORE ONE

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Project Division
Yelahanka Zone

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White Topping Road From Sheshadripuram First Grade College to Aroma Bakery Junction via 3rd crss road, 1st A main road, 16TH B cross road

Concrete Cube Compressive Strength Test Report

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SL NO	Description of work	Grade of Concrete	Quantity in 'Cum'	Date of Casting	Date of Testing	Age of Test	Weight of cube in 'Kg'	Density in Kg/cum	Crushing load in 'KN'	Compressive strength in 'Mpa'	Avg Compressive strength in 'Mpa'	Individual Cube Strength Variation +/- 15%
	PQC WORK	M40	79.00	17.04.23	15.05.23	28 days	8.49	2515	1264	56.17	54.44	3.18
							8.60	2548	1201	53.37		-1.97
							8.52	2524	1210	53.77		-1.23
					15.05.23	28 days	8.40	2489	1190	52.88	53.73	-1.58
							8.44	2500	1235	54.88		2.14
							8.47	2510	1202	53.42		-0.58
							8.44	2500	1242	55.20	55.06	0.25
							8.45	2504	1250	55.55		0.89
							8.47	2510	1225	54.44		-1.13

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